



Health Threat from Wildfire Smoke

Information for the Public

What is a wildfire?

A wildfire is any fire burning out of control in natural vegetation – grass, weeds, crops, brush or forests.

When do most wildfires occur in Michigan?

Most wildfires in Michigan take place in March, April and May before new green grass comes up and the trees have not sprouted their foliage. The dead leaves and grass ignite easily and the typical weather pattern of windy days and low humidity creates an environment where fires start easily and spread rapidly.

How many wildfires occur every year in Michigan?

Each year fire departments respond to between 10,000 and 12,000 wildfires. These fires typically burn thousands of acres, and millions of dollars are spent on suppression costs and replacing destroyed property.

What is the number-one cause of wildfires in Michigan?

Burning debris, such as grass, leaves, brush and trash causes the most wildfires. Yard clean-up, when mixed with dry, warm, windy weather, results in about one-third of all wildfires each year.

How does wildfire smoke affect your health?

Smoke from wildfires is a mixture of gases and fine particles from burning trees and other plant materials. Smoke can hurt your eyes, irritate your respiratory system and worsen heart and lung diseases.

How can you tell if wildfire smoke is affecting you?

Smoke can cause coughing, a scratchy throat, irritated sinuses, shortness of breath, chest pain, headaches, stinging eyes, a runny nose and can worsen asthma. If you have heart or lung disease, smoke might make your symptoms worse.

Who is more likely to be affected by health threats from wildfire smoke?

If you have heart or lung disease, such as congestive heart failure, angina, COPD, emphysema, or asthma, you are at a higher risk of having health problems. **Older adults** are more likely to be affected by smoke because they are more likely to have heart or lung diseases than younger people. **Children** are more likely to be affected by health threats from smoke because their

airways are still developing and because they breathe more air per pound of body weight than adults. Children also are more likely to be active outdoors.

How can you protect yourself from wildfire smoke?

- Limit your exposure to smoke.
- Listen and watch for news or health warnings about wildfire smoke. Pay attention to public health messages about staying safe.
- If you are advised to stay home, keep indoor air as clean as possible by keeping doors, windows and fireplace dampers shut. Run an air conditioner if you have one, but keep the fresh-air intake closed and the filter clean to prevent outdoor smoke from getting inside.
- If you do not have an air conditioner and it is too warm to stay inside with the windows closed, seek shelter somewhere else.
- When smoke levels are high, do not use anything that burns, such as candles, fireplaces, or gas stoves. Do not vacuum, because vacuuming stirs up particles already inside your home. Do not smoke, because smoking puts even more pollution into the air.
- When driving through smoky areas, car windows and vents should be kept closed. Air conditioning should be set to “recirculate” to avoid exposure to unhealthy outside air.
- Follow your doctor’s advice about medicines and about your respiratory management plan if you have asthma or another lung disease. Call your doctor if your symptoms worsen.
- If you choose to wear a dust mask for protection from smoke, the U.S. Environmental Protection Agency (EPA) recommends that disposable particle masks labeled “N95” or “P1000” should be used. They are available at most hardware stores. These types of masks can be difficult for people with lung disease to use, so a doctor should be consulted before using.

How can you protect yourself during cleanup following a wildfire?

- Areas covered in dust and soot should be thoroughly wet prior to cleanup as a means to reduce further air pollutants. Cleanup workers should wear an N95 or P1000 mask and replace it daily. Areas where asbestos and other hazardous materials are suspected should be avoided.

Materials adapted from:

1. Centers for Disease Control & Prevention: <http://www.bt.cdc.gov/disasters/wildfires/facts.asp>
2. American Lung Association: Protect Yourself From Lethal Wildfire Smoke
3. Michigan Department of Natural Resources: Frequently Asked Questions About Wildfires